REMARKS/ARGUMENTS

Reconsideration of the above-identified application in view of the present amendment is respectfully requested. By this amendment, claims 1, 14, and 17 are amended, claim 16 is canceled, and claims 18 and 19 are added. Claim 14 is amended to insert "such" in line 10 so that the phrase in line 10 reads "arranged spaced so far apart from each other such that said membrane meets" in order to overcome the objection under item 2 of this office action. Claim 1 is likewise amended to insert "such" in the same phrase so that the phrase in line 10 also reads "arranged spaced so far apart from each other such that said membrane meets". Claim 14 is amended to delete the phrase "gas impermeable" in order to overcome the rejection of claims 14 and 15 under 35 U.S.C. 112, first paragraph in item 4 of this office action. Claims 1, 14, and 17 are each amended to delete the phrase "like a balloon" in order to overcome the rejection of claims 1, 3-8, 13-15, and 17 under 35 U.S.C. 112, second paragraph in item 5 of this office action. These amendments are not done to further distinguish the claims from the prior art.

Claims 1 and 17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Okada (3,758,133) in view of Braunschadel (6,056,318). This rejection is respectfully traversed for the following reasons.

To establish a claim of obviousness, there must be some suggestion or motivation to a person having ordinary skill in the art to modify the reference or to combine reference teachings (MPEP §706.02(j)). Further, if the proposed combination "would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims

prima facie obvious." (MPEP §2143.01). Moreover, it is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983).

First, the applicant respectfully disagrees with the examiners response at item 11, second paragraph, to applicant's arguments filed January 11, 2006. The fact that the Okada invention can be modified by the Brauhschadel membrane and vent assembly appears to be an "obvious to try" test for rejecting claims 1 and 17. An "obviousness to try" is not the standard test for a rejection based on obviousness. MPEP §2145 (page 2100-122). There is no indication in the art that modifying Okada in view of Braunschadel would be successful.

Further, such a proposed combination of Okada and Braunschadel does not teach or suggest all of the claim limitations of claims 1 and 17. Specifically, neither Okada nor Braunschadel either alone or in combination discloses an extensible membrane bulging forward toward an exterior before reaching a device for destroying the membrane.

Also, there is no motivation in Okada or Braunschadel, or in the knowledge of one of ordinary skill in the art to combine the reference teachings of Okada and Braunschadel as proposed in the rejection of claims 1 and 17. The Office Action merely states that it would have been obvious to do so as to safely accommodate a variety of vehicle occupants who impart different loads when impacting the gas bag in a vehicle collision. One of ordinary skill in the art, however, will recognize that there is no need to include the fabric layer 4 of Braunschadel in the device of Okada in the manner taught by Braunschadel.

In fact, such a modification of Okada to have the membrane bulge forward toward an exterior before reaching the device would change the principle operation of Okada. Okada discusses the principle operation of the invention at column 2, line 17. In particular, Okada states:

> "This invention obviates these defects in such a way that when the driver is flung against the air bag upon vehicle collision, the bag is pushed and is deformed forwards, and thereby the normally closed escape device is immediately opened for discharging the internal air from the bag to decrease the internal pressure."

Any bulging of the film 8 of Okada forward toward an exterior before reaching the device would change the principle operation of Okada, since the normally closed escape valve 8 of Okada would not immediately open to discharge the internal air from the bag, when the driver is flung against the air bag upon vehicle collision.

In this respect too, a person skilled in the art would choose a material for the membrane of Okada that is not extensible and does not bulge as claimed in claims 1 and 17 to ensure a reliable cutting of the membrane in order to accomplish the immediate opening of the valve to discharge the internal air from the bag.

Moreover, the Okada reference teaches away from modifying its design to use the fabric layer 4 of Braunschadel. As disclose at col. 2, lines 35-41 of Braunschadel, the fabric layer 4 is gas permeable and thus allows air leakage. By contrast, the design of Okada does not allow air leakage until the valve 8 immediately opens to discharge the internal air as stated above. Okada specifically teaches away from allowing air leakage before the valve is opened. In particular, Okada states the following at Column 2, line 1.

> "For lowering the repelling power of the air bag acting on the driver, it has been hitherto proposed that the air bag be provided with a small hole for air leakage. However, with this arrangement not only is there waste in that the internal air leaks in the course of expansion of the air but also there is a great time lag between the collision of the car and the expansion of the bag."

Thus, Okada teaches away from modifying its design using the gas permeable fabric 4 of Braunschadel, since such a modification would produce air leakage.

Also, Braunschadel leads away from the invention of claim 1. A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). In particular, according to Braunschadel, the outflow opening is to be reduced when a heavy body plunges into the gas bag and increases the internal pressure of the gas bag (see Col. 2, lines 56-61). This is achieved by a non-elastic second membrane 3, which is disposed between the outflow opening 2 and the first membrane 4 (see Col. 2, lines 35-36) and entrained by the first membrane, thereby reducing the cross section of the outflow opening (see Col. 2, lines 42-55). By contrast, the outflow opening 20, according to the present invention, is initially closed by the membrane 24 and only to be opened when a predetermined internal pressure is reached. The present invention allows gas to exit out of the gas bag faster for a heavier body plunging into the gas bag. It is not evident why one of ordinary skilled in the art, without knowledge of the present invention, would combine Okada with Braunschadel.

Therefore, in view of the above-mentioned reasons, claim 1 is allowable. Claims 3-8 and 13, which depend from claim 1, are allowable as depending from an allowable claim and also for their specific feature recited therein.

Claims 9-12 stand rejected under 35 U.S.C. 102(b) as being anticipated by Okada. This rejection is respectfully traversed.

Okada does not disclose or suggest a membrane made of an extensible material which covers an outflow opening of the gas bag as claimed in claim 9. By contrast, Okada only discloses that the part of the front surface portion of the air bag 3 is formed as a film 8 of reduced thickness as shown in Fig. 5 to serve as a valve. Okada fails to disclose that the film is made of extensible material. Contrary to the Examiner's argument, Okada does not disclose that the film is "capable of being extended". In fact, a person skilled in the art would rather choose an inelastic material to ensure a reliable cutting of the film 8 to accomplish the immediate opening of the valve to discharge the internal air from the bag.

Further, Okada does not disclose or suggest a membrane that expands to meet a device serving for destroying the membrane. By contrast, the gas bag and film 8 move forward to be cut by the cutter 9. Okada does not disclose that the film 8 expands when the gas bag deforms and moves forward.

Moreover, if Okada were modified with an extensible membrane, such expansion of the membrane would change the principle operation of Okada, because the normally closed escape valve 8 of Okada would not immediately open to discharge the internal air from the bag, when the driver is flung against the air bag upon vehicle collision.

Therefore, claim 9 is allowable. Claims 10-12, which depend from claim 9, are allowable as depending from an allowable claim and also for their specific feature recited therein.

New claim 19, which depends from claim 9, should be allowed for the same reasons as claim 9 and also for the additional feature that the membrane is made of an elastomeric material. Neither Okada nor Braunschadel taken either alone or in combination discloses or suggests a membrane that is made of an elastomeric material. Therefore, claim 19 is allowable.

Claim 14 stands rejected 35 U.S.C. 103(a) as being unpatentable over Okada (3,758,133) in view of Braunschadel (6,056,318). Claim 14 is amended to recite that the membrane defines a recess that extends inwardly of the gas bag from the outlet opening prior to inflation of the gas bag, the recess of said membrane having a pair of side walls that face each other and extend inwardly from said outlet opening. Neither Okada nor Braunschadel either alone or in combination discloses or suggests this feature. Therefore, claim 14 is allowable.

Also, claim 14 should be allowed for the following additional reasons. First, the applicant respectfully disagrees with the examiners response at item 11, second paragraph, to applicant's arguments filed January 11, 2006. The fact that the Okada invention can be modified by the Brauhschadel membrane and vent assembly appears to be an "obvious to try" test for rejecting claim 14. An "obviousness to try" is not the standard test for a rejection based on obviousness. MPEP §2145 (page 2100-122). There is no indication in the art that modifying Okada in view of Braunschadel would be successful.

Further, neither Okada nor Braunschadel either alone or in combination discloses an extensible membrane that bulges outwards through the outlet opening before reaching a device for destroying the membrane.

Also, there is no motivation in Okada or Braunschadel, or in the knowledge of one of ordinary skill in the art to combine the reference teachings of Okada and Braunschadel as proposed in the rejection of claim 14. The Office Action merely states that it would have been obvious to do so as to safely accommodate a variety of vehicle occupants who impart different loads when impacting the gas bag in a vehicle collision. One of ordinary skill in the art, however, will recognize that there is no need to include the fabric layer 4 of Braunschadel in the device of Okada in the manner taught by Braunschadel.

In fact, such a modification of Okada to have the membrane bulge outwards through the outlet opening before reaching the device would change the principle operation of Okada. Okada discusses the principle operation of the invention at column 2, line 17. In particular, Okada states:

> "This invention obviates these defects in such a way that when the driver is flung against the air bag upon vehicle collision, the bag is pushed and is deformed forwards, and thereby the normally closed escape device is immediately opened for discharging the internal air from the bag to decrease the internal pressure."

Any bulging of the film 8 of Okada outwards through the outlet opening before reaching the device would change the principle operation of Okada, since the normally closed escape valve 8 of Okada would not immediately open to discharge

the internal air from the bag, when the driver is flung against the air bag upon vehicle collision.

In this respect too, a person skilled in the art would choose a material for the membrane of Okada that is not extensible and does not bulge as claimed in claim 1 to ensure a reliable cutting of the membrane in order to accomplish the immediate opening of the valve to discharge the internal air from the bag.

Moreover, the Okada reference teaches away from modifying its design to use the fabric layer 4 of Braunschadel. As disclose at col. 2, lines 35-41 of Braunschadel, the fabric layer 4 is gas permeable and thus allows air leakage. By contrast, the design of Okada does not allow air leakage until the valve 8 immediately opens to discharge the internal air as stated above. Okada specifically teaches away from allowing air leakage before the valve is opened. In particular, Okada states the following at Column 2, line 1.

> "For lowering the repelling power of the air bag acting on the driver, it has been hitherto proposed that the air bag be provided with a small hole for air leakage. However, with this arrangement not only is there waste in that the internal air leaks in the course of expansion of the air but also there is a great time lag between the collision of the car and the expansion of the bag."

Thus, Okada teaches away from modifying its design using the gas permeable fabric 4 of Braunschadel, since such a modification would produce air leakage.

Also, Braunschadel leads away from the invention of claim 14. A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v.*

Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). In particular, according to Braunschadel, the outflow opening is to be reduced when a heavy body plunges into the gas bag and increases the internal pressure of the gas bag (see Col. 2, lines 56-61). This is achieved by a non-elastic second membrane 3, which is disposed between the outflow opening 2 and the first membrane 4 (see Col. 2, lines 35-36) and entrained by the first membrane, thereby reducing the cross section of the outflow opening (see Col. 2, lines 42-55). By contrast, the outflow opening 20, according to the present invention, is initially closed by the membrane 24 and only to be opened when a predetermined internal pressure is reached. The present invention allows gas to exit out of the gas bag faster for a heavier body plunging into the gas bag. It is not evident why one of ordinary skilled in the art, without knowledge of the present invention, would combine Okada with Braunschadel.

Therefore, in view of the above-mentioned reasons, claim 14 is allowable.

Claim 15, which depends from claim 14, should be allowable for the same reasons as claim 14 and also for the additional feature recited therein. Claim 15 is amended to recite that all of the gas bag remains rearward from the device when the membrane is destroyed by the device. Neither Okada nor Braunschadel nor any of the other prior art disclose or suggest this feature. Okada clearly shows portions of the gas bag that are located forward of the cutting device. Therefore, claim 15 is allowable.

New claim 18 recites a gas bag protection device comprising a gas bag which has an outer wall being made of a first material. The outer wall has at least one

outflow opening. The gas bag protection device also comprises a membrane made of an extensible second material which is fastened to the outer wall and directly covers the outflow opening in a not fully inflated state of the gas bag. The gas bag protection device further comprises a device provided outside the gas bag and serving for destroying the membrane. The gas bag and the device are arranged spaced apart from each other such that the membrane can directly meet the device, but only when a predetermined internal pressure of the gas bag has been reached. The membrane is arranged inside the gas bag volume and bulges outwards through the outlet opening before directly reaching the device, thereby giving the gas bag a greater volume. The membrane defines a recess that extends inwardly of the gas bag from the outlet opening prior to inflation of the gas bag. The recess of the membrane has side walls that extend inwardly from the outlet opening. Neither Okada nor Braunschadel nor any of the other prior art disclose or suggest all of the features recited in claim 18. Therefore, claim 18 is allowable.

In view of the foregoing, it is respectfully submitted that the above-identified application is in condition for allowance, and allowance of the above-identified application is respectfully requested.

Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 20-0090.

Respectfully submitted,

Thomas L. Tarolli
Reg. No. 20,177

TAROLLI, SUNDHEIM, COVELL,
& TUMMINO L.L.P.
1300 East Ninth Street, Suite 1700
Cleveland, Ohio 44114
Phone:(216) 621-2234
Fax: (216) 621-4072
Customer No.: 26,294